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 NEWS  3  Feb 24   PCTGEN now available on STN
 NEWS  4  Feb 24   TEMA now available on STN
 NEWS  5  Feb 26   NTIS now allows simultaneous left and right truncation
 NEWS  6  Feb 26   PCTFULL now contains images
 NEWS  7  Mar 04   SDI PACKAGE for monthly delivery of multifile SDI results
 NEWS  8  Mar 24   PATDPAFULL now available on STN
 NEWS  9  Mar 24   Additional information for trade-named substances without
                   structures available in REGISTRY
 NEWS 10  Apr 11   Display formats in DGENE enhanced
 NEWS 11  Apr 14   MEDLINE Reload
 NEWS 12  Apr 17   Polymer searching in REGISTRY enhanced
 NEWS 13  Jun 13   Indexing from 1947 to 1956 added to records in CA/CAPLUS
 NEWS 14  Apr 21   New current-awareness alert (SDI) frequency in
                   WPIDS/WPINDEX/WPIX
 NEWS 15  Apr 28   RDISCLOSURE now available on STN
 NEWS 16  May 05   Pharmacokinetic information and systematic chemical names
                   added to PHAR
 NEWS 17  May 15   MEDLINE file segment of TOXCENTER reloaded
 NEWS 18  May 15   Supporter information for ENCOMPPAT and ENCOMPLIT updated
 NEWS 19  May 19   Simultaneous left and right truncation added to WSCA
 NEWS 20  May 19   RAPRA enhanced with new search field, simultaneous left and
                   right truncation
 NEWS 21  Jun 06   Simultaneous left and right truncation added to CBNB
 NEWS 22  Jun 06   PASCAL enhanced with additional data
 NEWS 23  Jun 20   2003 edition of the FSTA Thesaurus is now available
 NEWS 24  Jun 25   HSDB has been reloaded
 NEWS 25  Jul 16   Data from 1960-1976 added to RDISCLOSURE
 NEWS 26  Jul 21   Identification of STN records implemented
 NEWS 27  Jul 21   Polymer class term count added to REGISTRY

 NEWS EXPRESS  April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)
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=> s musa and ripening
L1 549 MUSA AND RIPENING

=> s l1 and transform?
L2 22 L1 AND TRANSFORM?

=> duplicate remove l2
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, CAPLUS'
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PROCESSING COMPLETED FOR L2
L3 18 DUPLICATE REMOVE L2 (4 DUPLICATES REMOVED)

=> d l3 1-10

L3 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:133983 CAPLUS
DN 138:182057
TI Usage of zinc finger proteins and their fusions with effector domains to regulate gene expression and metabolic pathways in plants

IN Barbas, Carlos F.; Stege, Justin T.; Guan, Xueni; Dalmia, Bipin
PA USA
SO U.S. Pat. Appl. Publ., 84 pp., Cont.-in-part of U.S. Ser. No. 620,897.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003037355	A1	20030220	US 2001-765555	20010119
PRAI	US 2000-177468P	P	20000121		
	US 2000-620897	A2	20000721		

L3 ANSWER 2 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:300698 BIOSIS
DN PREV200300300698
TI Pectate lyase gene expression and enzyme activity in ***ripening*** banana fruit.
AU Marin-Rodriguez, M. C.; Smith, D. L.; Manning, K.; Orchard, J.; Seymour, G. B. (1)
CS (1) Plant Genetics and Biotechnology Department, Horticulture Research International, Wellesbourne, Warwickshire, CV35 9EF, UK: graham.seymour@hri.ac.uk UK
SO Plant Molecular Biology, (April 2003, 2003) Vol. 51, No. 6, pp. 851-857. print.
ISSN: 0167-4412.
DT Article
LA English

L3 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:367322 CAPLUS
DN 136:364908
TI DNA expression constructs with bidirectional promoters and agricultural uses
IN Gan, Susheng; Xie, Mingtang; He, Yuehui
PA University of Kentucky Research Foundation, USA
SO U.S., 16 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6388170	B1	20020514	US 2000-545244	20000407
PRAI	US 2000-545244		20000407		

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:545414 CAPLUS
DN 135:133107
TI Usage of zinc finger protein to regulate gene expression and metabolic pathways in plants and creation of five zinc finger proteins
IN Barbas, Carlos F., III; Stege, Justin T.; Guan, Xue Ni; Dalmia, Bipin
PA Scripps Research Institute, USA
SO PCT Int. Appl., 156 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001052620	A2	20010726	WO 2001-US1817	20010119
WO 2001052620	A3	20020207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001029641	A5	20010731	AU 2001-29641	20010119
EP 1276869	A2	20030122	EP 2001-942508	20010119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US 2000-177468P	P	20000121		
US 2000-620897	A	20000721		
WO 2001-US1817	W	20010119		

L3 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:205351 CAPLUS
DN 130:248758
TI cDNA sequence of banana 1-aminocyclopropanecarboxylate synthase and aminocyclopropanecarboxylate oxidase, and vectors containing cDNAs used for genetic ***transformation*** of plants
IN Bird, Colin Roger; Fletcher, Jonathon David
PA Zeneca Limited, UK
SO U.S., 22 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5886164	A	19990323	US 1996-632598	19960415
US 6262346	B1	20010717	US 1999-231240	19990115
PRAI US 1996-632598	A1	19960415		

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:626949 CAPLUS
DN 132:149082
TI Sucrose phosphate synthase and sucrose synthase enzyme distribution during banana fruit ***ripening***
AU Bassinello, Priscila Z.; Fioravante, Ana Paula; Do Nascimento, Joao R. O.; Cordenunsi, Beatriz R.; Lajolo, Franco M.
CS Faculdade de Ciencias Farmaceuticas/USP - Depto. de Alimentos e Nutricao, Cidade Universitaria, Sao Paulo, 05508-900, Brazil
SO Ciencia e Tecnologia de Alimentos (1999), 19(1), 102-106
CODEN: CTALDN; ISSN: 0101-2061
PB Sociedade Brasileira de Ciencia e Tecnologia de Alimentos
DT Journal
LA Portuguese

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:790686 CAPLUS
DN 130:34020
TI Genetic control of fruit ***ripening***
IN Bird, Colin Roger; Medina-Suarez, Rosybel De Jesus; Seymour, Graham Barron
PA Zeneca Ltd., UK
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9853085	A1	19981126	WO 1998-GB1297	19980505
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9872257	A1	19981211	AU 1998-72257	19980505
	US 2002026657	A1	20020228	US 2001-949052	20010907
PRAI	GB 1997-10370	A	19970520		
	WO 1998-GB1297	W	19980505		

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:184020 CAPLUS
DN 128:253783
TI Genetic control of fruit ***ripening*** and senescence in banana
IN Seymour, Graham Barron; Bird, Colin Roger; Medina-Suarez, Rosybel De Jesus
PA Zeneca Limited, UK; Seymour, Graham Barron; Bird, Colin Roger; Medina-Suarez, Rosybel De Jesus
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811228	A2	19980319	WO 1997-GB2424	19970908
	WO 9811228	A3	19980423		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9741291	A1	19980402	AU 1997-41291	19970908

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     EP 931150          A2   19990728       EP 1997-939069   19970908
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2000517164      T2   20001226       JP 1997-533834   19970908
PRAI GB 1996-18862      A    19960910
     GB 1997-8366       A    19970425
     WO 1997-GB2424     W    19970908

L3   ANSWER 9 OF 18  CAPLUS  COPYRIGHT 2003 ACS on STN
AN   1997:696590  CAPLUS
DN   127:330642
TI   Method and apparatus for  ***ripening***  perishable products in a
     temperature controlled room
IN   Mizera, Grzegorz Pawel; Franaszek, Stanislaw
PA   Chiquita Brands, Inc., USA
SO   PCT Int. Appl., 47 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
     ---------------    ----  --------       ---------------  --------
PI   WO 9737545          A1   19971016       WO 1997-US5646   19970404
         W:  AU, CZ, JP, NO
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9724411          A1   19971029       AU 1997-24411    19970404
     EP 906024           A1   19990407       EP 1997-920146   19970404
         R:  BE, DE, FR, GB, NL, IE, FI
PRAI PL 1996-313751           19960411
     PL 1996-313804           19960415
     US 1997-781824           19970110
     WO 1997-US5646           19970404

L3   ANSWER 10 OF 18  CAPLUS  COPYRIGHT 2003 ACS on STN
AN   1997:157317  CAPLUS
DN   126:235991
TI   Biochemical pathways for the formation of esters in  ***ripening***
     fruit
AU   Wyllie, S. Grant; Leach, D. N.; Nonhebel, H. N.; Lusunzi, I.
CS   Centre for Biostructural and Biomolecular Research, University of Western
     Sydney, New South Wales, 2753, Australia
SO   Special Publication - Royal Society of Chemistry (1996), 197(Flavour
     Science), 52-57
     CODEN: SROCDO; ISSN: 0260-6291
PB   Royal Society of Chemistry
DT   Journal
LA   English


=> d l3 11-18

L3   ANSWER 11 OF 18  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
     DUPLICATE 1
AN   1989:268400  BIOSIS
DN   BA88:4482
TI   CORRELATION BETWEEN INCREASE IN 6 PHOSPHOFRUCTOKINASE ACTIVITY AND
     APPEARANCE OF THREE MULTIPLE FORMS IN  ***RIPENING***  BANANA.
```

AU IYER M G; KAIMAL K S; NAIR P M
CS FOOD TECHNOL. ENZYME ENGINEERING DIV., BHABHA ATOMIC RES. CENT., BOMBAY 400 085, INDIA.
SO PLANT PHYSIOL BIOCHEM (PARIS), (1989) 27 (1), 99-106.
CODEN: PPBIEX. ISSN: 0981-9428.
FS BA; OLD
LA English

L3 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1988:527508 CAPLUS
DN 109:127508
TI Starch ***transformation*** during banana ***ripening*** : the amylase and glucosidase behavior
AU Garcia, Elisabeth; Lajolo, Franco M.
CS Fac. Cienc. Farm., USP, Sao Paulo, Brazil
SO Journal of Food Science (1988), 53(4), 1181-6
CODEN: JFDSAZ; ISSN: 0022-1147
DT Journal
LA English

L3 ANSWER 13 OF 18 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN DUPLICATE 2
AN 83:97635 AGRICOLA
DN IND83083655
TI Starch-sugar ***transformation*** during banana ***ripening*** : the behavior of UDP glucose pyrophosphorylase, sucrose synthetase and invertase ***Musa*** acuminata, uridine diphosphate.
AU Terra, N.N.; Garcia, E.; Lajolo, F.M.
AV DNAL (389.8 F7322)
SO Journal of food science., July/Aug 1983 Vol. 48, No. 4. p. 1097-1100
Publisher: Chicago : Institute of Food Technologists.
ISSN: 0022-1147
NTE Includes references.
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L3 ANSWER 14 OF 18 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN DUPLICATE 3
AN 82:45742 AGRICOLA
DN IND82029695
TI Starch ***transformation*** during banana ***ripening*** . I. The phosphorylase and phosphatase behavior in ***Musa*** acuminata.
AU Areas, J.A.G.; Lajolo, F.M.
AV DNAL (TX545.J6)
SO Journal of food biochemistry., 1981 Vol. 5, No. 1. p. 19-37 ill
Publisher: Westport, Conn., Food and Nutrition Press.
ISSN: 0145-8884
NTE Includes 35 ref.
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L3 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1972:83667 CAPLUS
DN 76:83667
TI Biochemical changes in banana during ***ripening***
AU Sgarbieri, Valdomiro C.; Figueiredo, Iovaldo B.
CS Inst. Tecnol. Aliment., Campinas, Brazil
SO Revista Brasileira de Tecnologia (1971), 2(2), 85-94
CODEN: RBTNAO; ISSN: 0370-3835
DT Journal
LA Portuguese

L3 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1970:486725 CAPLUS
DN 73:86725
TI Variations in the composition of Poyo bananas (***Musa*** acuminata) during ***ripening***
AU Rocchetti, Giuseppe; Cozzi, Paolo
CS Lab. Chim. Technol. Agr., Ist. Agron. Oltremare, Italy
SO Rivista di Agricoltura Subtropicale e Tropicale (1969), 63(10-12), 457-70
CODEN: RSTTAP; ISSN: 0035-6026
DT Journal
LA Italian

L3 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1968:112221 CAPLUS
DN 68:112221
TI Biochemical ***transformations*** occurring during the ***ripening*** of bananas. I. Pulp-to-peel ratio, total and soluble solids, organic acids, and carbohydrates
AU Sgarbieri, Valdemiro C.; Figueiredo, Iovaldo B.
CS Centro Trop. Pesqui. Tecnol. Aliment., Campinas, Brazil
SO Anais da Associacao Brasileira de Quimica (1967), 26(1-2), 49-66
CODEN: AABQAL; ISSN: 0365-0073
DT Journal
LA Portuguese

L3 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1967:481271 CAPLUS
DN 67:81271
TI Biochemical ***transformations*** during banana ***ripening***
AU Figueiredo, Iovaldo B.; Sgarbieri, Valdemiro C.
CS Centro Trop. Pesq. Tecnol. Alimentos, Campinas/Sao Paulo, Brazil
SO Arquivos Brasileiros de Nutricao (1965), 21(1), 65-86
CODEN: ABNUAW; ISSN: 0365-0782
DT Journal
LA Portuguese

=> s banana and pectate(w)lyase
L4 19 BANANA AND PECTATE(W) LYASE

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DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L4
L5 9 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)

=> d l5 1-9

L5 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1
AN 2003:300698 BIOSIS
DN PREV200300300698
TI ***Pectate*** ***lyase*** gene expression and enzyme activity in ripening ***banana*** fruit.
AU Marin-Rodriguez, M. C.; Smith, D. L.; Manning, K.; Orchard, J.; Seymour, G. B. (1)
CS (1) Plant Genetics and Biotechnology Department, Horticulture Research International, Wellesbourne, Warwickshire, CV35 9EF, UK: graham.seymour@hri.ac.uk UK
SO Plant Molecular Biology, (April 2003, 2003) Vol. 51, No. 6, pp. 851-857. print.
ISSN: 0167-4412.
DT Article
LA English

L5 ANSWER 2 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AN 2003:311702 BIOSIS
DN PREV200300311702
TI ***Pectate*** ***lyase*** activity during ripening of ***banana*** fruit.
AU Payasi, Anurag; Sanwal, G. G. (1)
CS (1) Department of Biochemistry, University of Lucknow, Lucknow, 226 007, India: girdharsanwal@yahoo.com India
SO Phytochemistry (Amsterdam), (June 2003, 2003) Vol. 63, No. 3, pp. 243-248. print.
ISSN: 0031-9422.
DT Article
LA English

L5 ANSWER 3 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AN 2001:303111 BIOSIS
DN PREV200100303111
TI Survival of memory T cells specific for Japanese cypress pollen allergen is maintained by cross-stimulation of putative ***pectate*** ***lyases*** from other plants.
AU Nakamura, Y. (1); Takagi, S.; Suzuki, M.; Ito, H.; Murakami, S.; Ohta, N.
CS (1) Department of Otorhinolaryngology, Nagoya City University Medical School, 1 Azakawasumi, Mizuhocho, Mizuhoku, Nagoya, 467-8601 Japan
SO Allergy (Copenhagen), (May, 2001) Vol. 56, No. 5, pp. 385-392. print.
ISSN: 0105-4538.
DT Article
LA English
SL English

L5 ANSWER 4 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
AN 2001:453578 BIOSIS
DN PREV200100453578
TI Isolation and expression of two ***pectate*** ***lyase*** genes during fruit ripening of ***banana*** (Musa acuminata.
AU Pua, Eng-Chong (1); Ong, Choon-Kiat; Liu, Pei; Liu, Jian-Zhong

CS (1) Plant Genetic Engineering Laboratory, Department of Biological Sciences, Faculty of Science, National University of Singapore, 10 Kent Ridge Crescent, Singapore, 119260: dbspuaec@mus.edu.sg Republic of Singapore
SO Physiologia Plantarum, (September, 2001) Vol. 113, No. 1, pp. 92-99. print.
ISSN: 0031-9317.
DT Article
LA English
SL English

L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1998:184020 CAPLUS
DN 128:253783
TI Genetic control of fruit ripening and senescence in ***banana***
IN Seymour, Graham Barron; Bird, Colin Roger; Medina-Suarez, Rosybel De Jesus
PA Zeneca Limited, UK; Seymour, Graham Barron; Bird, Colin Roger; Medina-Suarez, Rosybel De Jesus
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811228	A2	19980319	WO 1997-GB2424	19970908
	WO 9811228	A3	19980423		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9741291	A1	19980402	AU 1997-41291	19970908
	EP 931150	A2	19990728	EP 1997-939069	19970908
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000517164	T2	20001226	JP 1997-533834	19970908
PRAI	GB 1996-18862	A	19960910		
	GB 1997-8366	A	19970425		
	WO 1997-GB2424	W	19970908		

L5 ANSWER 6 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN DUPLICATE 5
AN 1998:53864 AGRICOLA
DN IND20631474
TI A cDNA clone highly expressed in ripe ***banana*** fruit shows homology to ***pectate*** ***lyases*** .
AU Dominguez-Puigjaner, E.; Llop, I.; Vendrell, M.; Prat, S.
AV DNAL (450 P692)
SO Plant physiology, July 1997. Vol. 114, No. 3. p. 1071-1076
Publisher: Rockville, MD : American Society of Plant Physiologists, 1926-
CODEN: PLPHAY; ISSN: 0032-0889

NTE Includes references
CY Maryland; United States
DT Article; Conference
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L5 ANSWER 7 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN DUPLICATE 6
AN 1998:22435 AGRICOLA
DN IND20625098
TI ***Pectate*** ***lyase*** of Colletotrichum gloeosporioides attacking avocado fruits: cDNA cloning and involvement in pathogenicity.
AU Wattad, C.; Kobiler, D.; Dinoor, A.; Prusky, D.
AV DNAL (SB599.P45)
SO Physiological and molecular plant pathology, Mar 1997. Vol. 50, No. 3. p. 197-212
Publisher: London ; Orlando : Academic Press, c1986-
CODEN: PPPYBC; ISSN: 0885-5765
NTE Includes references
CY England; United Kingdom
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1988:146782 CAPLUS
DN 108:146782
TI ***Pectate*** ***lyases*** of Erwinia chrysanthemi: Pel E-like polypeptides and pelE homologous sequences in strains isolated from different plants
AU Thurn, K. K.; Barras, F.; Kegoya-Yoshino, Y.; Chatterjee, A. K.
CS Dep. Plant Pathol., Kansas State Univ., Manhattan, KS, 66506, USA
SO Physiological and Molecular Plant Pathology (1987), 31(3), 429-39
CODEN: PMPPEZ; ISSN: 0885-5765
DT Journal
LA English

L5 ANSWER 9 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 7
AN 1980:264677 BIOSIS
DN BA70:57173
TI MACERATING ENZYME PRODUCTION BY COLLETOTRICHUM-MUSAE AND FUSARIUM-SEMITECTUM INCITANTS OF ***BANANA*** MUSA-ACUMINATA FRUIT DECAY.
AU SHILLINGFORD C A; SINCLAIR J B
CS DEP. PLANT PATHOL., UNIV. ILL., URBANA, ILL. 61801, USA.
SO PHYTOPATHOL Z, (1980) 97 (2), 127-135.
CODEN: PHYZA3. ISSN: 0031-9481.
FS BA; OLD
LA English

=> FIL STNGUIDE
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 59.77 59.98

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul 11, 2003 (20030711/UP).

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L5 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1
AB Two distinct cDNA clones showing sequence homology to higher-plant
pectate ***lyase*** (Pel) genes were isolated from ripening
banana fruits. The transcripts were detected only in fruit tissue
and both were strongly ripening-related. Yeast transformation with the
most highly expressed Pel clone produced a recombinant protein with
pectate ***lyase*** activity, demonstrating that this
sequence
was likely to encode a ***pectate*** ***lyase*** protein in
planta. An assay developed for measuring the action of the endogenous
enzyme from ***banana*** pulp tissue revealed a significant increase
in calcium-dependent ***pectate*** ***lyase*** activity during
ripening. The enhanced levels of enzyme activity corresponded with an
increase in soluble polyuronides from ***banana*** pulp.

L5 ANSWER 2 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
AB ***Pectate*** ***lyase*** (PEL) activity was demonstrated in ripe
banana fruits on supplementing the homogenizing medium with
cysteine and Triton X-100. The enzyme was characterized on the basis of
alkaline pH optimum, elimination of the activity by EDTA and activation by
Ca2+. PEL activity was not detected in preclimacteric ***banana***
fruits. PEL activity increased progressively from early climacteric and
reached maximum level at climacteric peak and declined in post climacteric
and over ripened fruits. Replacing pectate with pectin in PEL assay
manifested enzyme activity even in preclimacteric fruits. In contrast to
PEL, polygalacturonase activity progressively increased during fruit
ripening even in postclimacteric fruits.

L5 ANSWER 3 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AB In view of recent studies on the mechanisms of the survival of peripheral
memory T cells, we tested the biologic role of ***pectate***
lyase , a pectin-degrading enzyme, as the cross-reactive antigen
required for the recurring survival signals for human T cells specific for
Cha o 1, a pollen allergen molecule of the Japanese cypress. We determined
a 16-mer epitope peptide for the T-cell clone, and prepared synthetic
oligopeptides of homologous regions in putative ***pectate***
lyase of other plants. Of these homologous peptides, ZePel
(Zinnia
elegans), ban 17 (***banana***), and Amb a 1.1 (short ragweed) induced

strong proliferative responses of the Cha o 1-specific T-cell clone in vitro. In addition, suboptimal doses of peptide homologs derived from ***banana*** and short ragweed enhanced the survival potency of this T-cell clone without detectable proliferative responses to the peptides. When there was no antigen stimulation, the T-cell clone decreased in viable cell number and lost antigen-specific proliferation activity on day 6 during in vitro incubation. On the other hand, T-cell clones incubated with these survival-inducing peptides maintained proliferative activity to Cha o 1 even on day 9. Serum derived from the donor patient did not contain detectable levels of IgE specific to ***banana*** or short ragweed by CAP-RAST. These results show that human T cells specific for pollen allergen seem to use cross-reactive ***pectate*** ***lyase*** peptides to deliver survival signals even in the absence of pollen allergen, and memory T cells maintained in such a manner might be functioning at the onset of allergic pollinosis, although pollen allergens are seasonal.

L5 ANSWER 4 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4

AB Two cDNAs, designated MWPL1 and MWPL2, encoding putative ***pectate*** ***lyases*** (Pel; EC 4.2.2.2), which catalyze the cleavage by beta-elimination of alpha-1fwdarw4-linked galacturonosyl residues of pectins found mostly in middle lamella and primary cell wall in plants, were isolated from ripening fruit of ***banana*** (Musa acuminata) and their expressions in fruit during ripening and in response to ethylene were investigated. MWPL1 and MWPL2 encode a single polypeptide of 407 and 454 amino acid residues, respectively. The two cDNAs shared an overall identity of 75% in both nucleotide and deduced amino acid sequences. Sequence comparison of MWPL1 and other plant Pels revealed the homology ranging from 76% with zinnia to 48% with ragweed. Southern analysis indicated that MWPL1 might be present as a single copy gene, and there might be up to two copies of MWPL2 in the ***banana*** genome. The two cDNAs were expressed differentially and/or spatially in various ***banana*** organs, with female flower and fruit tissues showing accumulation of the MWPL2 transcript, which was not detected in root, pseudostem, leaf, male flower and ovary, whereas the MWPL1 transcript was not detectable in all organs tested. In fruit tissue during ripening, although transcripts of both members were not detectable in unripe preclimacteric fruits, they began to accumulate as ripening progressed and the level remained high thereafter in overripe fruits. However, the magnitude of transcript accumulation differed between the two Pel members, with substantially more abundant MWPL2 than MWPL1 in ripening fruit. Similar differential transcript accumulation was also observed between peel and pulp, where the former was markedly higher than the latter. Expression of both Pel members was also affected by exogenous ethylene, whose presence at 5-100 ppm stimulated accumulation of MWPL1 and MWPL2 transcripts in preclimacteric fruit, suggesting that ethylene may play an important regulatory role in regulating Pel expression during fruit ripening of the ***banana*** .

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	70.49

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